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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/705,940	11/06/2000	Richard M. Fike	0942.429006 (IVGN 174.2 C	7464

65482 7590 01/22/2007

INVITROGEN CORPORATION
C/O INTELLEVATE
P.O. BOX 52050
MINNEAPOLIS, MN 55402

EXAMINER	
SCHLAPKOHL, WALTER	

ART UNIT	PAPER NUMBER
1636	

MAIL DATE	DELIVERY MODE
01/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.

EXAMINER	
ART UNIT	PAPER
	20070115

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Interview Summary	Application No.	Applicant(s)	
	09/705,940	FIKE ET AL.	
	Examiner	Art Unit	
	Walter Schlapkohl	1636	

All participants (applicant, applicant's representative, PTO personnel):

(1) *Walter Schlapkohl*. (3)_____.

(2) *Douglas Golightly*. (4)_____.

Date of Interview: *09 January 2007*.

Type: a)☒ Telephonic b)☐ Video Conference
c)☐ Personal [copy given to: 1)☐ applicant 2)☐ applicant's representative]

Exhibit shown or demonstration conducted: d)☐ Yes e)☒ No.
If Yes, brief description: _____.

Claim(s) discussed: *None*.

Identification of prior art discussed: *1994 Sigma Catalog, pages 201-204*.

Agreement with respect to the claims f)☐ was reached. g)☐ was not reached. h)☒ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: *See Continuation Sheet*.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Walter Schlapkohl
Examiner's signature, if required

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicant requested media preparation instructions present in the 1994 Sigma Catalog reference. The 1994 Sigma Catalog has been cited in the prosecution of this case; however these pages of the reference were not provided to Applicant previously. Furthermore, Applicant stated difficulty in obtaining these papers from other sources. Therefore, Examiner agreed to obtain the requested pages from the catalog and forward them to Applicant. The requested pages are attached .

NANCY VOGEL
PRIMARY EXAMINER

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)
In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

POWDERED MEDIA PREPARATION INSTRUCTIONS

PREPARATION OF MEDIA FOR FILTRATION

Powdered media or salt mixtures are extremely hygroscopic and should be protected from atmospheric moisture. The entire contents of each package should be used immediately after opening. Preparing media in concentrated form is not recommended. Some free base amino acids have low solubility coefficients and insoluble salt complexes may precipitate in concentrated solution.

Supplements can be added prior to filtration or introduced aseptically to sterile media. The nature of the supplement may affect the storage conditions and shelf life of the medium.

PROCEDURE

- Measure out 90% of final volume of tissue culture grade water. **Water should be at room temperature.**
- While gently stirring the water, add the powdered medium or salt mixture. Stir until dissolved. **Do not heat water.**
- Rinse original package with a small amount of water to remove all traces of powder. Add to solution.
- To the solution, add the required amount of sodium bicarbonate from the chart below for each liter of final volume of medium being prepared. Stir until dissolved.
- While stirring, adjust the pH to 0.1-0.3 pH units below the desired pH since the pH may rise during vacuum filtration. The use of 1 N HCl or 1 N NaOH is recommended.
- Bring medium to final volume with tissue culture grade water.
- Sterilize immediately by filtration using a membrane with a porosity of 0.2 micrometers or less.
- Aseptically dispense into sterile containers. Store liquid medium refrigerated at 0-5°C and in the dark.

For more specific information regarding powdered media or salt mixtures, see the product insert that accompanies each package.

SODIUM BICARBONATE ADDITION TABLE

The following are recommended sodium bicarbonate concentrations for 1X (single strength) powdered media using 7.5% Sodium Bicarbonate ($NaHCO_3$) Solution, (Product No. S 8761), or Cell Culture Tested Sodium Bicarbonate, Powder, (Product No. S 5761):

Powdered Media	Product Number	$NaHCO_3$ 7.5% Solution (ml/L)	$NaHCO_3$ Powder (g/L)
AMES' MEDIUM	A 1420	25.7	1.932
BGJb	B 6644	46.6	3.5
BME EBSS HEPES	B 4391	29.3	2.2
BME EBSS AUTO-MOD™	B 8265	29.3	2.2
BME EBSS	B 9638	29.3	2.2
BME HBSS	B 9763	4.7	0.350
BME Diploid	B 9888	29.3	2.2
CMRL-1066	C 0422	29.3	2.2
CRCM-30	C 5030	8.0	0.6
DME/F-12 w/o phenol red	D 2906	16.0	1.2
DME/F-12 HYBRI-MAX®	D 6905	16.0	1.2
DME/F-12	D 9785	16.0	1.2
DME/F-12	D 8900	16.0	1.2
DME HEPES	D 1152	49.3	3.7
DME w/o phenol red	D 2902	49.3	3.7
DME	D 3656	49.3	3.7
DME	D 3916	49.3	3.7
DME Deficient	D 4655	49.3	3.7
DME	D 5030	49.3	3.7
DME AUTO-MOD™	D 5280	49.3	3.7
DME	D 5523	49.3	3.7
DME	D 5648	49.3	3.7
DME HYBRI-MAX®	D 6655	49.3	3.7
DME HYBRI-MAX®	D 6780	49.3	3.7
DME	D 7777	49.3	3.7
D-PBS	D 5652	—	—
D-PBS	D 5773	—	—
D-PBS	D 6650	—	—
D-PBS HYBRI-MAX®	D 7030	—	—
EBSS w/o phenol red	E 3261	29.3	2.2
EBSS	E 6132	29.3	2.2
EBSS HYBRI-MAX®	E 9509	29.3	2.2
F-12 (Coon's Modification)	F 6636	35.7	2.676
FISCHER'S	F 5008	15.0	1.125
Glasgow MEM	G 6148	36.7	2.75
HBSS w/o phenol red	H 1387	4.7	0.35
HBSS	H 2387	4.7	0.35
HBSS w/o phenol red	H 4891	4.7	0.35
HBSS	H 6136	4.7	0.35
HBSS HYBRI-MAX®	H 6393	4.7	0.35
H-Y HYBRI-MAX®	H 9014	46.6	3.5
IMDM HYBRI-MAX®	I 2510	40.3	3.024
IMDM	I 7633	40.3	3.024
KREBS-HENSELEIT	K 3753	28.0	2.1
KREBS-RINGER	K 4002	16.8	1.26

(—) = not applicable

(continued)

TECHNICAL INFORMATION

SODIUM BICARBONATE ADDITION TABLE (continued)

Powdered Media	Product Number	$NaHCO_3$ 7.5% Solution (ml/L)	$NaHCO_3$ Powder (g/L)
L-15	L 4386	—	—
LAH HBSS	L 1762	4.7	0.35
LAH EBSS	L 3762	29.3	2.2
LAH EBSS w/o phenol red	L 6388	29.3	2.2
McCOY'S 5A	M 4892	29.3	2.2
McCOY'S 5A	M 6523	29.3	2.2
McCOY'S 5A w/o phenol red	M 9270	29.3	2.2
MCDB-105	M 6395	—	—
MCDB-110	M 6520	—	—
MCDB-131	M 8537	15.7	1.176
MCDB-151	M 6645	15.7	1.176
MCDB-153	M 7403	15.7	1.176
MCDB-201	M 6770	—	—
MCDB-302	M 2021	15.7	1.176
M-199 HBSS	M 0393	4.7	0.35
M-199 EBSS HEPES	M 2520	29.3	2.2
M-199 HBSS w/o phenol red	M 3274	4.7	0.35
M-199 EBSS w/o phenol red	M 3769	29.3	2.2
M-199 EBSS	M 5017	29.3	2.2
MEM EBSS	M 0268	29.3	2.2
MEM JOKLIK	M 0518	26.7	2.0
MEM EBSS NEAA	M 0643	29.3	2.2
MEM Alpha	M 0644	29.3	2.2
MEM EBSS AUTO-MOD™	M 0769	29.3	2.2
MEM Alpha	M 0894	29.3	2.2
MEM HBSS NEAA	M 1018	4.7	0.35
MEM EBSS HEPES	M 2645	29.3	2.2
MEM EBSS NEAA, w/o phenol red	M 3024	29.3	2.2
MEM HBSS NEAA, w/o phenol red	M 3149	4.7	0.35
MEM EBSS w/o phenol red	M 4144	29.3	2.2
MEM HBSS	M 4642	4.7	0.35
MEM for Suspension	M 4767	29.3	2.2
MEM EBSS	M 4898	29.3	2.2
MEM EBSS Deficient	M 7270	29.3	2.2
MEM for Suspension AUTO-MOD™	M 7272	29.3	2.2
MEM EBSS	M 7395	29.3	2.2
MEM EBSS NEAA with LAH	M 7399	29.3	2.2
NCTC 135	N 3262	29.3	2.2
NCTC 135 HYBRI-MAX®	N 5138	29.3	2.2
Nut Mix F-10 HEPES	N 1387	16.0	1.2
Nut Mix F-12 HEPES	N 4388	15.7	1.176
Nut Mix F-10	N 6635	16.0	1.2
Nut Mix F-12	N 6760	15.7	1.176
Nut Mix F-12K	N 3520	33.3	2.5
RPMI-1640	R 1383	26.7	2.0
RPMI-1640 HEPES	R 4130	26.7	2.0
RPMI-1640 HYBRI-MAX®	R 5382	26.7	2.0
RPMI-1640	R 6504	26.7	2.0
RPMI-1640 Deficient	R 7130	26.7	2.0
RPMI-1640	R 7634	26.7	2.0
RPMI-1640 HYBRI-MAX®	R 8005	26.7	2.0
RPMI-1640 w/o phenol red	R 8755	26.7	2.0
RPMI-1640	R 9007	26.7	2.0
SFPF	S 2772	30.0	2.250
SFRE 199-1	S 2013	4.7	0.350
SFRE 199-2	S 2138	29.3	2.2
SPINNER SALTS	S 6011	29.3	2.2
SWIM'S S-77	S 2513	29.3	2.2
TYRODE'S SALTS	T 2145	13.3	1.0
WAYMOUTH MB752/1	W 1625	29.9	2.24
WILLIAMS' MEDIUM E	W 4125	29.3	2.2

(—) = not applicable

PREPARATION OF MEDIA FOR AUTOCLAVING AUTO-MOD™ POWDERED MEDIA

Product Nos. B 8265, D 5280, M 0769, M 7272, and R 7755

Sigma's AUTO-MOD™ powdered media are specially formulated to withstand the temperatures and conditions required for autoclaving. The same recommendations as with all powdered media for protection against atmospheric moisture and the preparation of concentrated media apply to AUTO-MOD™ media.

PROCEDURE

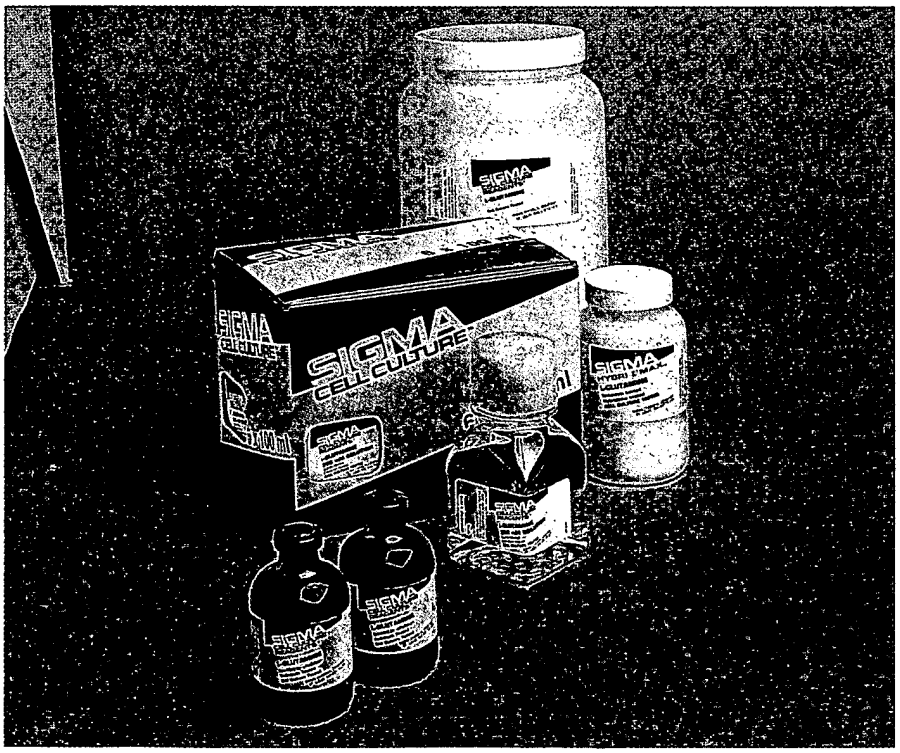
Medium supplements can be added on the basis of their thermostability, i.e., heat stable supplements can be added prior to autoclaving and heat labile supplements must be added aseptically after autoclaving. The storage conditions and shelf life of the supplemented medium will be determined by the type of supplement added.

- Measure out 90% of final volume of tissue culture grade water.
- While gently stirring the water, add the powdered AUTO-MOD™ medium. Stir until dissolved.
- Rinse original package with a small amount of water to remove all traces of powder. Add to solution.
- The pH for RPMI-1640, (Product No. R 7755), should be adjusted to 4.0 **before** autoclaving.
- Add final volume of tissue culture grade water. Since sodium bicarbonate and L-glutamine solutions will be added after autoclaving, subtract these volumes from the final volume **before** adding to medium.
- Autoclave medium at 121°C (250°F) at 15 psi for 15 minutes. Note: Autoclaves vary in performance. Validation of each system is recommended.
- Medium should be promptly removed from the autoclave to avoid extended heating and evaporation.
- After cooling medium to 15-20°C, add required amounts of sterile Sodium Bicarbonate Solution, 7.5% w/v (Product No. S 8761) and of L-Glutamine, using either a sterile 200 mM solution (Product No. G 7513) or γ-irradiated L-glutamine (Product No. G 6392) for each liter of final volume of medium being prepared. See the following table for appropriate amounts.
- If necessary, adjust the pH using sterile 1 N NaOH or 1 N HCl.
- Store liquid medium refrigerated at 0-5°C and in the dark.

SODIUM BICARBONATE AND L-GLUTAMINE ADDITION TABLE

Recommended sodium bicarbonate and L-glutamine concentrations for 1X (single strength) AUTO-MOD™ powdered media using 7.5% Sodium Bicarbonate ($NaHCO_3$) Solution, (Product No. S 8761), and 200 mM sterile L-Glutamine Solution, (Product No. G 7513):

Auto-Mod™ Medium	Product Number	$NaHCO_3$ 7.5% Solution (ml/L)	L-Glutamine 200 mM (ml/L)	L-Glutamine γ-Irradiated (g/L)
BME	B 8265	29.3	10.0	0.292
DME	D 5280	49.3	20.0	0.584
MEM	M 0769	29.3	10.0	0.292
S-MEM	M 7272	29.3	10.0	0.292
RPMI-1640	R 7755	26.7	10.25	0.3



QBSF-MEDIA

	QBSF-51	QBSF-52	QBSF-53	QBSF-55	QBSF-56	QBSF-58
PRODUCT NUMBERS	Q 3128	Q 3378	Q 3628	Q 3878	Q 4128	Q 4378
BASAL MEDIUM	IMDM	IMDM	IMDM	IMDM	IMDM	IMDM
BUFFER	HEPES	HEPES	HEPES	HEPES	HEPES	HEPES
HORMONE	INSULIN	INSULIN	INSULIN	INSULIN	INSULIN	
OTHER COMPONENTS	BSA TRANSFERRIN	BSA TRANSFERRIN	BSA TRANSFERRIN CHOLESTEROL	BSA TRANSFERRIN CHOLESTEROL	BSA TRANSFERRIN	
PROTEIN CONTENT	45µg/ml	45µg/ml	450µg/ml	65µg/ml	430µg/ml	
APPLICATION	SUSPENSION CULTURES	HYBRIDOMAS	PRODUCTION OF GROWTH FACTORS	HYBRIDOMAS	HUMAN BLOOD BLASTO-GENESIS; CELL CULTURES	BONE MARROW CELL CULTURES
CELL LINES	MOLT 4 DA-1 JURKAT WEHI K-562 COS RAJI NIH 3T3 HL-60 MLA 144 NAMAIWA NEURO 2A	SP 2/0-AG 14 NS-1	MLA 144	SP 2/0-AG 14 NS-1	SP2/0-AG 14 SP2 SA3 SP2 MAI SP2 SS1 SP2 SAS U 937	
REFERENCES	1,2,3,4,5,6					

1. Blair, D. et al. 1990. "The Biology of ets: Studies of the Leukemogenic 90 and Mitogenic Properties of v-ets Using Murine Retroviral Vectors" In Oncogenes in Signal Transduction and Cell Proliferation; ed. T.S. Prapas, in Appl. Biotech Series; Portfolio Publishing Co., Woodland, TX.
2. Van Beneden, R.J. et al. 1990. Oncogenes in Hematopoietic and Hepatic Fish Neoplasms. Cancer Research (Suppl.) 50:5671s-5674s.
3. Seth, A. et al. 1989. c-ets-2 proto-oncogene has mitogenic and oncogenic activity. Proc. Natl. Acad Sci. 86:7833-7834.
4. Halverson, D. et al. 1990. An oncogenic chromosome 8-9 gene fusion isolated following transfection of human ovarian carcinoma cell line DNA. Oncogene 5:1087-1089.
5. Lu, Y-y. et al. 1991. Tumorgenecity, metastasis and supression of MJC Class 1 expression in murine fibroblasts transformed by mutant v-ras deficient in GTP binding. Int. J. Cancer (Suppl.) 6:45-53.
6. Yuan, C-c. et al. 1989. Properties of a Murine Retroviral Recombinant of Avian Acute Leukemia Virus E26: A Murine Fibroblast Assay for v-ets Function. J. Virol. 63:205-215.